

# RECLAMATION

*Managing Water in the West*

## *Yuma Area Office Resource Plan And Executive Summary*

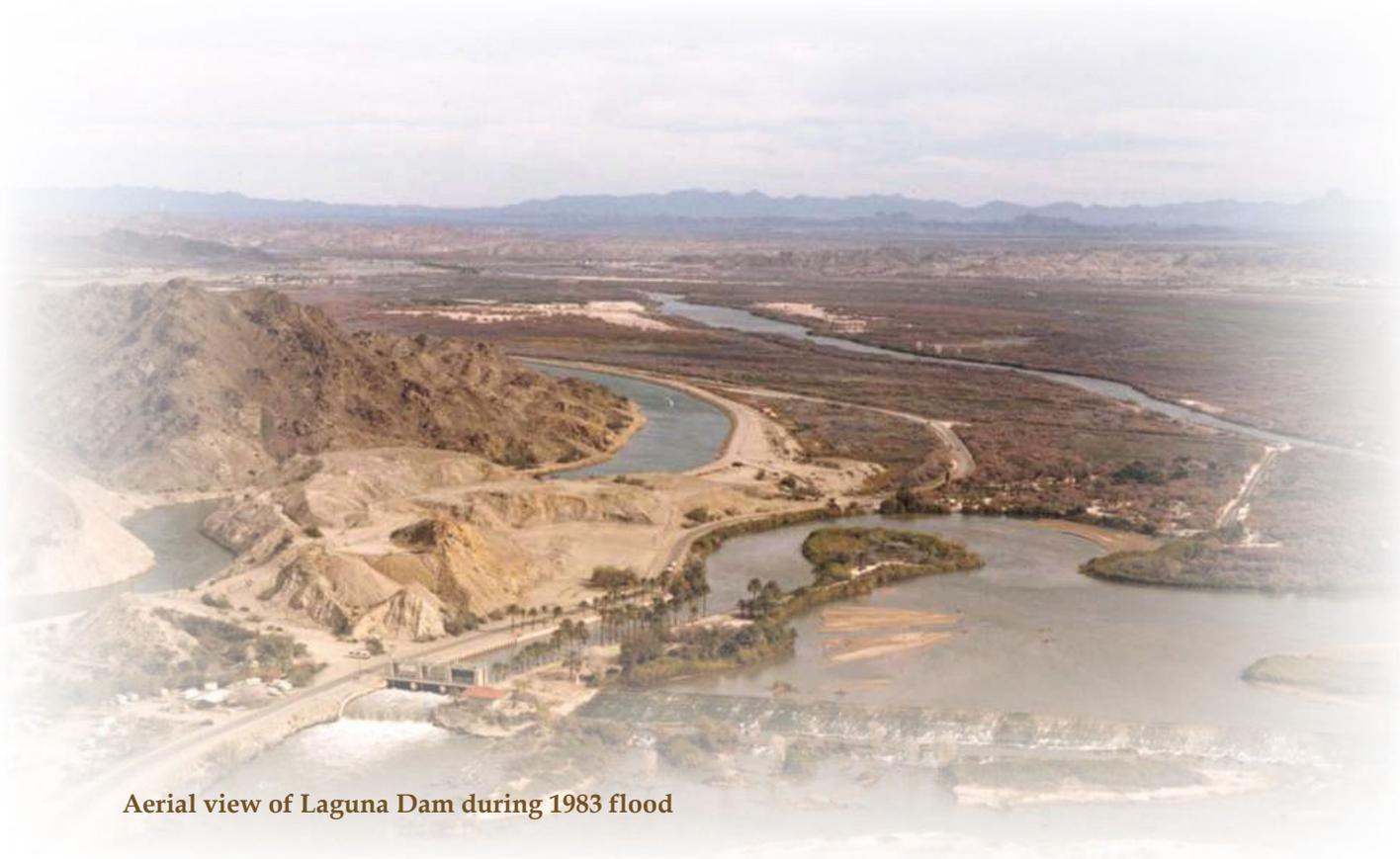


# TABLE OF CONTENTS

💧 Introduction	3
💧 YAO Area of Responsibility	4-7
💧 History	8-11
💧 YAO Resource Plan	12
💧 Budget and Planning Process	13-16
💧 Partnerships	17
💧 FY04-06 Action Items	18-28
💧 FY03 Accomplishments	29-33
💧 Acronyms List	34



Current Aerial View of Laguna Dam - RM 41.9



Aerial view of Laguna Dam during 1983 flood

# INTRODUCTION

## The Yuma Area Office (YAO):

- ◆ Maintains the Colorado River channel and levees from Davis Dam to the U.S.-Mexico border
- ◆ Administers all Colorado River water deliveries downstream of Davis Dam to users in southern Arizona, southern California, and Mexico:
  - About 95% of water deliveries go to agriculture, the leading industry (\$3.5B)
- ◆ Operates and maintains four drainage well fields in the Yuma area
- ◆ Maintains drainage canals
- ◆ Maintains the world's largest reverse osmosis desalting plant
- ◆ Conducts desalting technology research
- ◆ Manages all salinity control projects south of Imperial Dam
- ◆ Operates dredges and uses land-based heavy equipment to maintain the Colorado River channel for navigation, flood control, and water delivery
- ◆ Provides technical support and conducts water conservation demonstration projects
- ◆ Conducts habitat restoration and management projects



## YAO Core Values:

- ◆ Positive attitude
- ◆ Diversity
- ◆ Effective service
- ◆ Fact-based decision making
- ◆ Results oriented
- ◆ Achievement/Performance Recognition



# YUMA AREA OFFICE AREA OF RESPONSIBILITY

## Reclamation's mission:

- To manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public

## YAO's mission:

- To protect and enhance the Colorado River's natural and man-made resources while satisfying the water needs of our National and International customers

## Water Delivery:

- Deliver over 7 million acre-feet (MAF) of water annually to three lower basin states and Mexico
- Maintain over 30 water, land, and power contracts for several Federal projects
- Provide river water to  $\frac{3}{4}$  million people and 1.2 million acres of agricultural lands in 3 states and 7 rural counties



**Vision:**

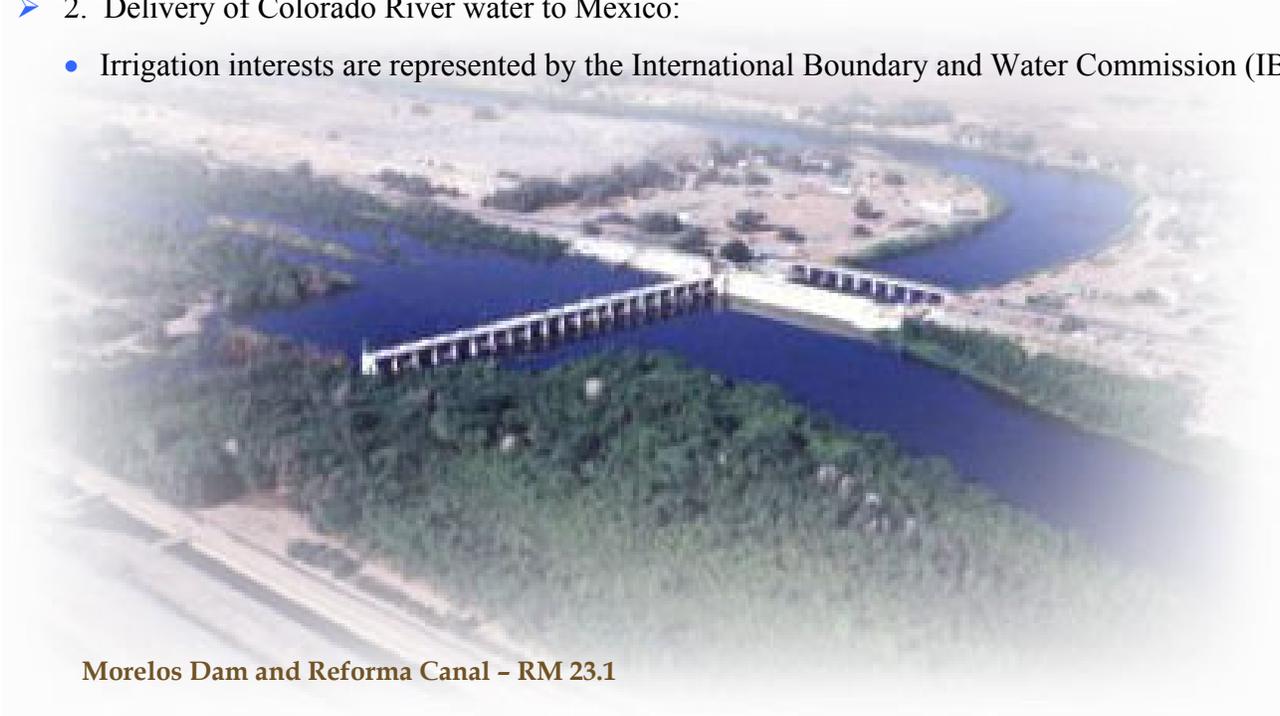
- To achieve excellence at delivering four core products and services:



- 1. Delivery of Colorado River water to U.S. customers such as California and Arizona irrigation districts, Indian Tribes, and municipalities:
  - River channel maintenance
  - Water scheduling, accounting, and delivery



- 2. Delivery of Colorado River water to Mexico:
  - Irrigation interests are represented by the International Boundary and Water Commission (IBWC)



**Morelos Dam and Reforma Canal - RM 23.1**

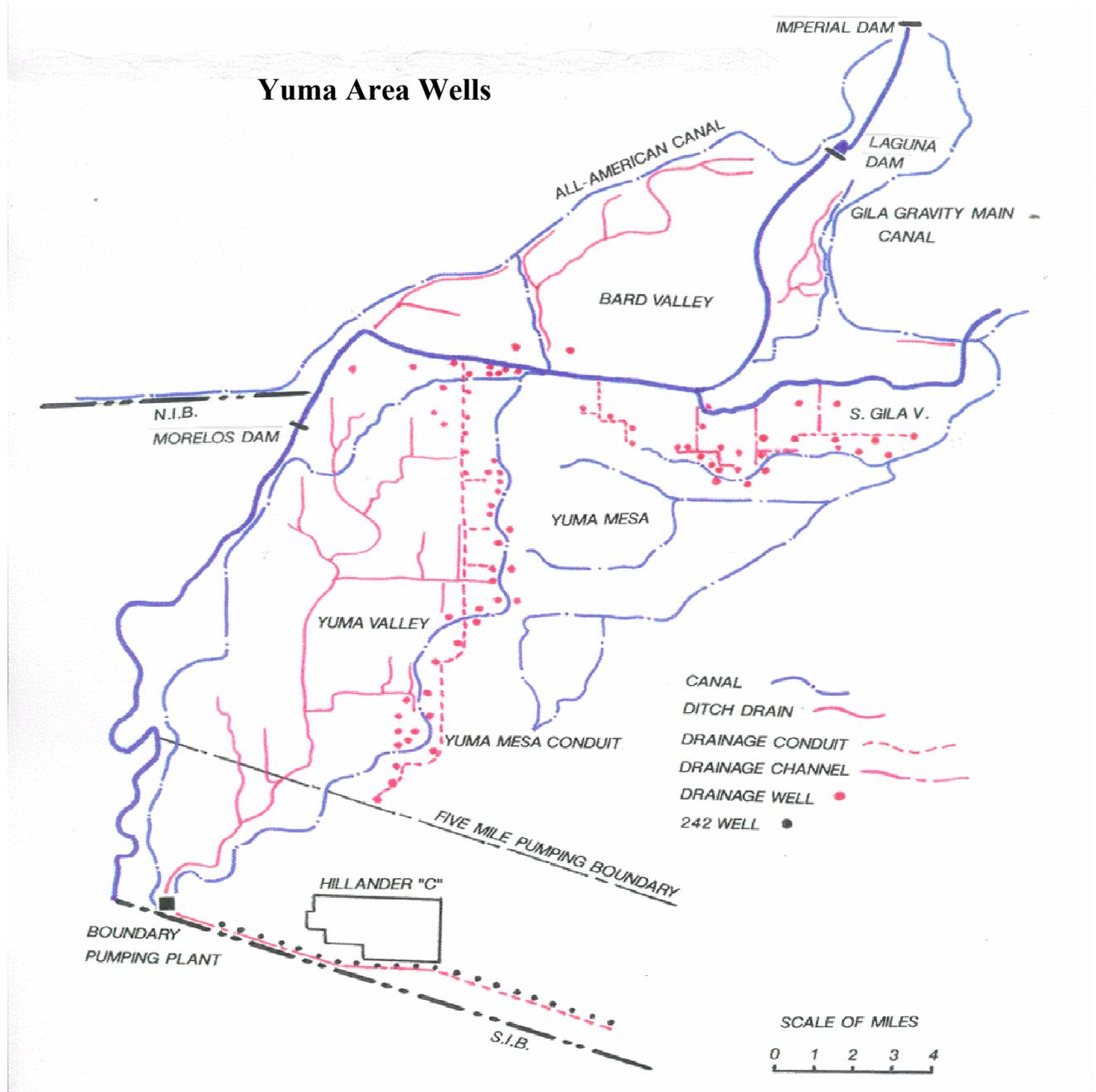
- 3. Colorado River environmental mitigation and enhancement (California, Arizona, and Federal game and fish regulators):
  - Backwater development and maintenance
  - Ensure National Environmental Policy Act (NEPA) compliance requirements



**Environmental Mitigation and Enhancement**

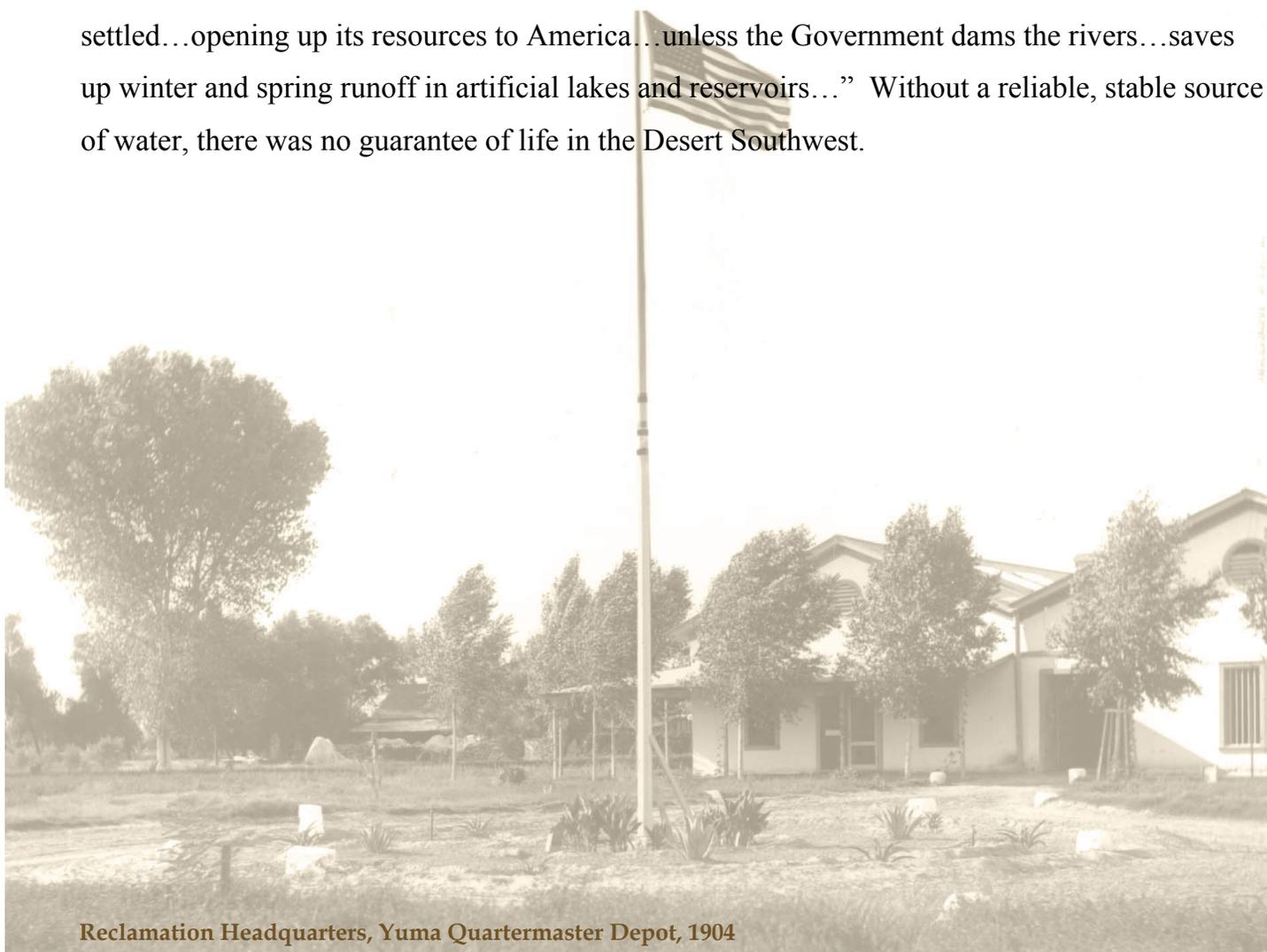
➤ 4. Management of Yuma Area groundwater for Yuma Irrigation districts, farmers, residents, and tribes. Four well fields are used for drainage control in the Yuma area:

- Yuma Mesa
- Yuma Valley
- South Gila
- 242



# HISTORY

- ◆ In 1902, Congress passed the Reclamation Act and created the U.S. Reclamation Service, which is known today as the Bureau of Reclamation (Reclamation).
- ◆ A year later, Reclamation moved into the Yuma area and created what was then called “The Great Yuma Irrigation Project.”
  - This was Reclamation’s first development along the Lower Colorado River, a 125,000 square-mile watershed congruent of Arizona, California, and Nevada.
- ◆ Explorer John Wesley Powell boated down the Colorado River in 1869 and became a National hero. He told our Nation, “The West is an arid land...hostile to farming...and will never be settled...opening up its resources to America...unless the Government dams the rivers...saves up winter and spring runoff in artificial lakes and reservoirs...” Without a reliable, stable source of water, there was no guarantee of life in the Desert Southwest.

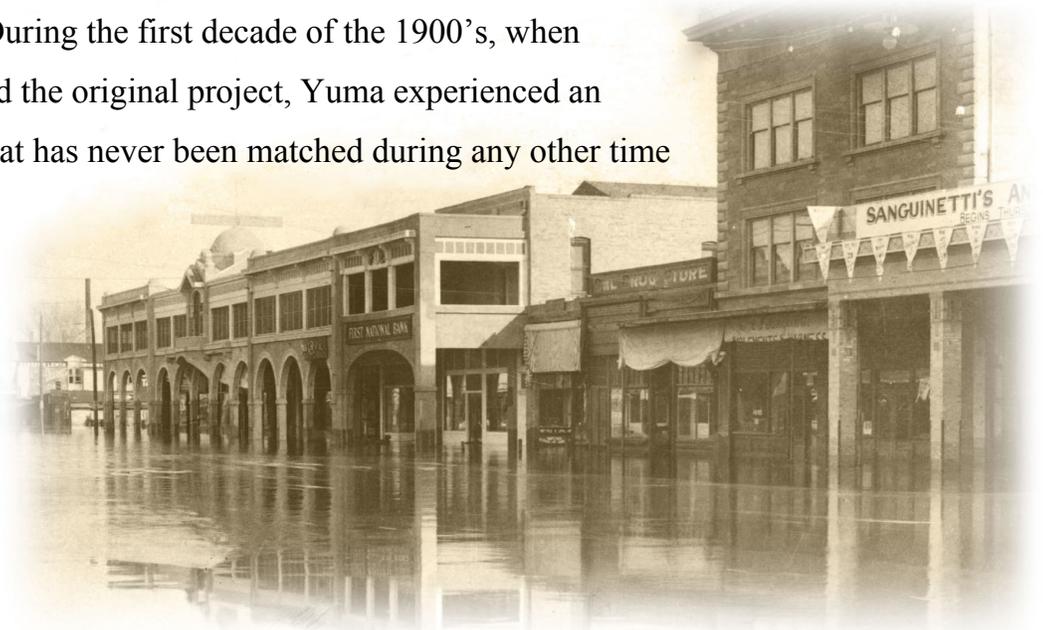


Reclamation Headquarters, Yuma Quartermaster Depot, 1904



Laguna Dam Celebration, March 31, 1909

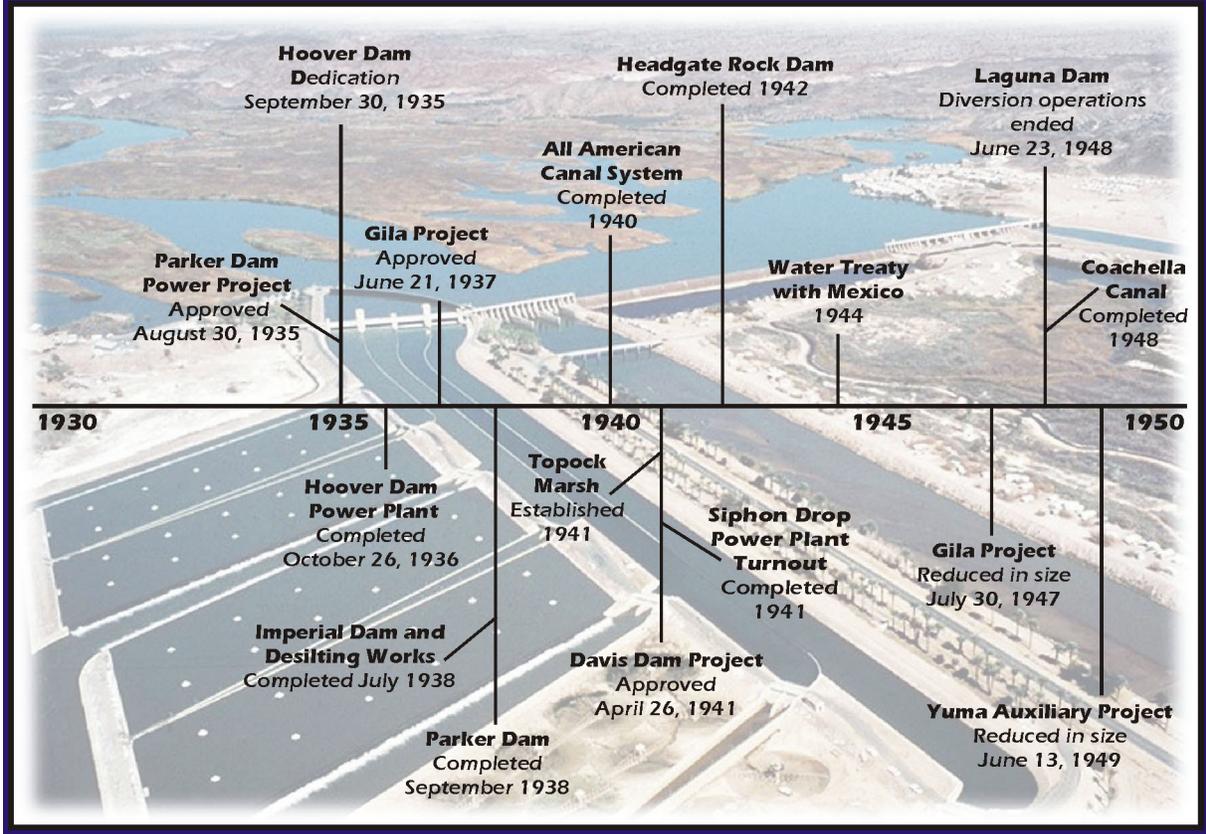
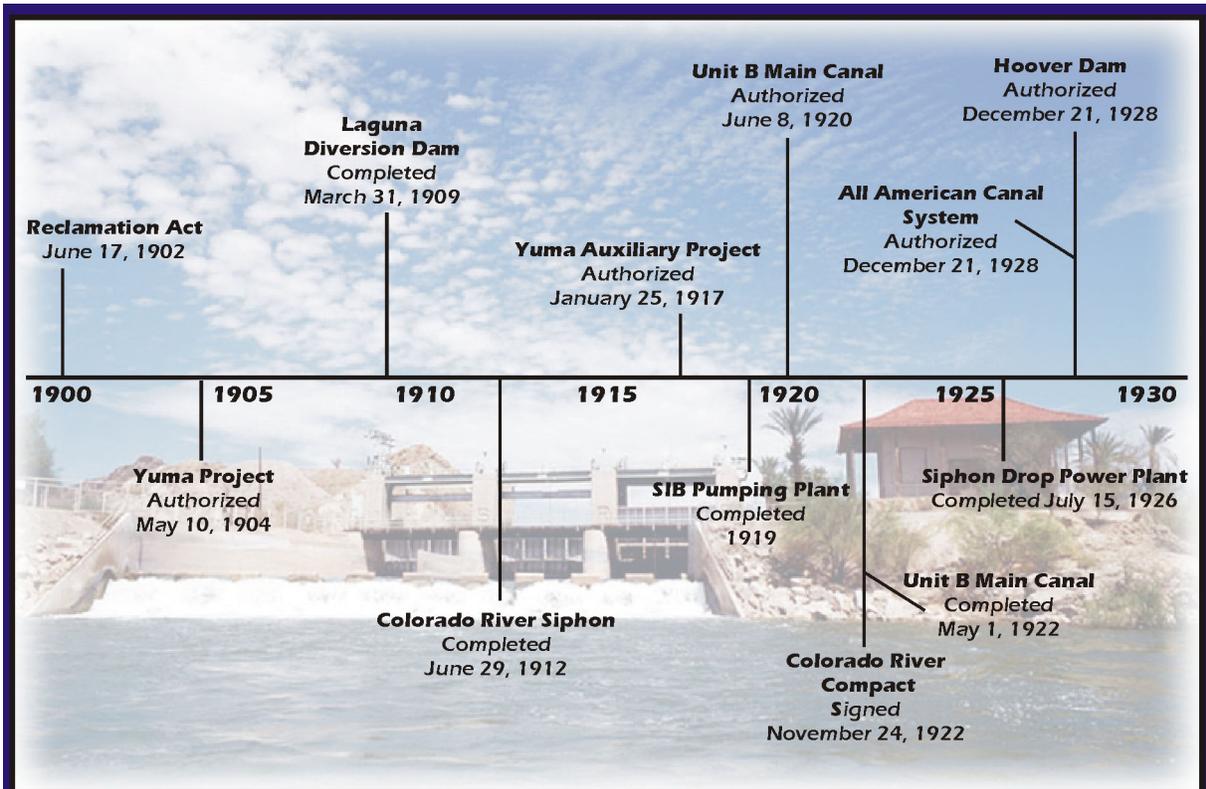
- ◆ In 1905, Reclamation began an ambitious venture with the construction of the Laguna Dam to divert water to farmlands in the Yuma area. Completed in 1909, it was the first authorized dam built on the Colorado River.
- ◆ Reclamation began constructing levees along the Colorado River in the early 1900's to protect floodplain lands between the Laguna Dam and the Mexican border.
- ◆ The Colorado River Siphon, completed in 1912, is to this day, considered an engineering marvel, as it carries water under the Colorado River to nurture the Yuma Valley.
- ◆ Ninety years later, due to the construction of Imperial Dam, Laguna Dam was converted to a regulatory structure, and reminds us of our beginnings.
- ◆ By controlling the Colorado River and its tributaries, Reclamation has transformed many river communities from dusty little towns into well irrigated, agricultural meccas. During the first decade of the 1900's, when Reclamation completed the original project, Yuma experienced an increased prosperity that has never been matched during any other time in history.



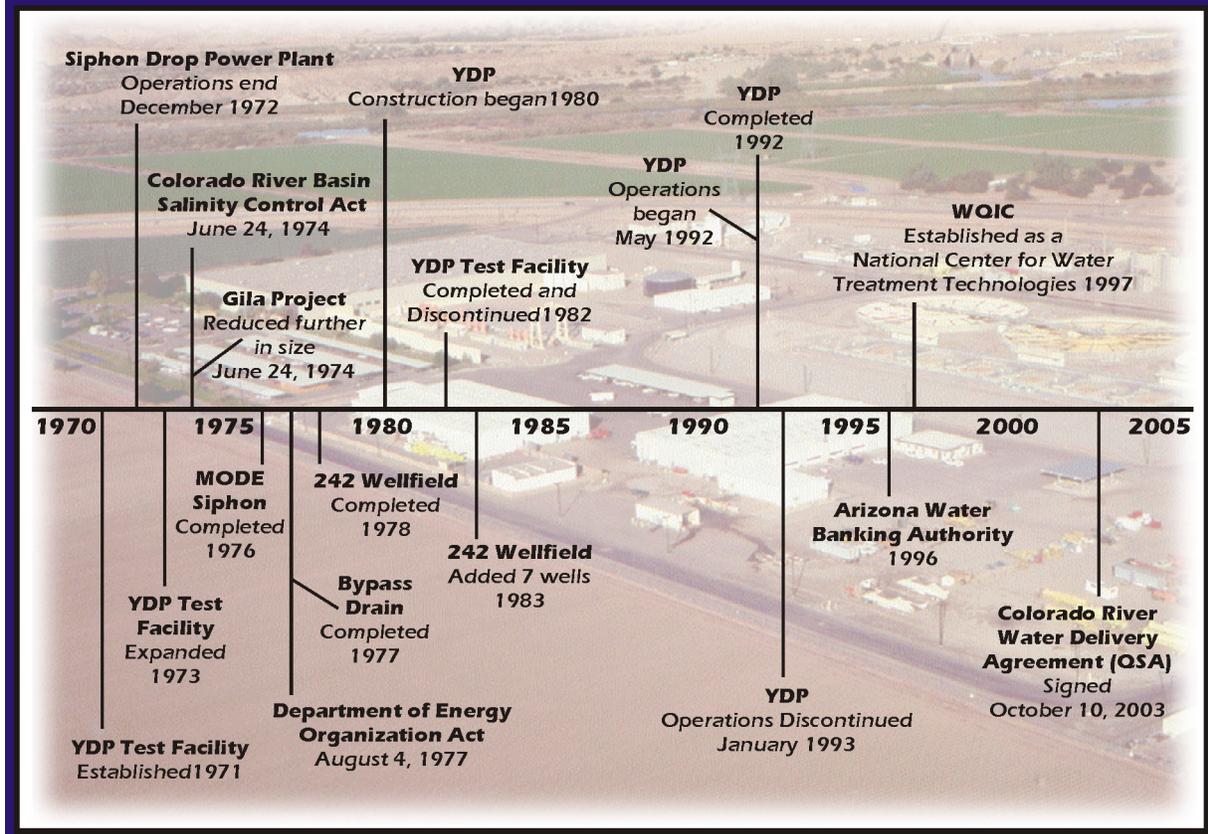
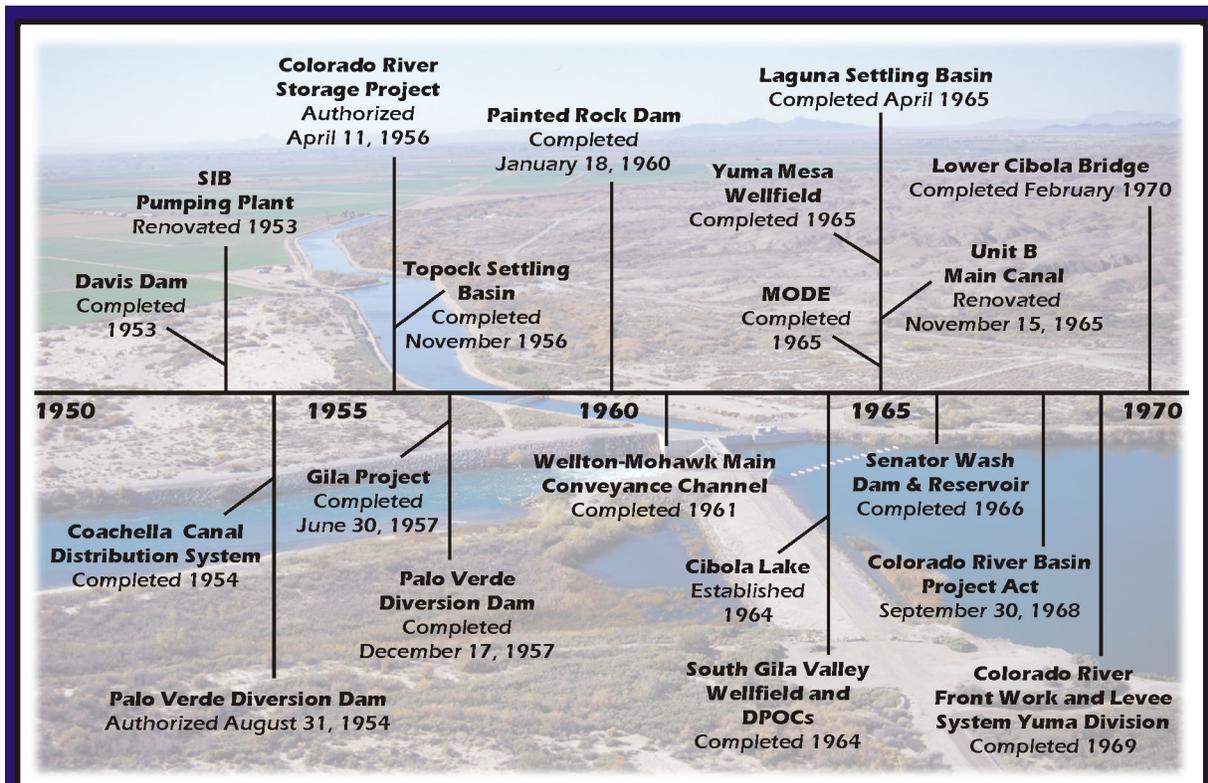
Yuma: Main, 1<sup>st</sup>, and 2<sup>nd</sup> Streets - January 22, 1916



# Historic Milestones



# Historic Milestones Continued



# YAO RESOURCE PLAN

- ◆ The YAO resource plan is a 10-year outlook with various **regular** and **recurring** work (baseline) and **1-time projects** (initiatives) not associated with the area office’s normal multi-year operating cycle. Both baseline and initiative work activities are quantified in terms of required resources.
- ◆ The resource plan is a tool to identify work and priorities; plan, justify, and coordinate work; and obtain measurable results. It facilitates a long-term planning process and projects results to enhance program efficiency, productivity, and cost effectiveness; and additionally, it enables the area office to better compete and deliver more value to its customers.
- ◆ Work plans in this document include applicable designs, required permits, contracts, coordination with other resource agencies, and projected cost estimates to accomplish the work.
  - **Baseline Work:** Regular and recurring work
  - **Initiative Work:** 1-time projects

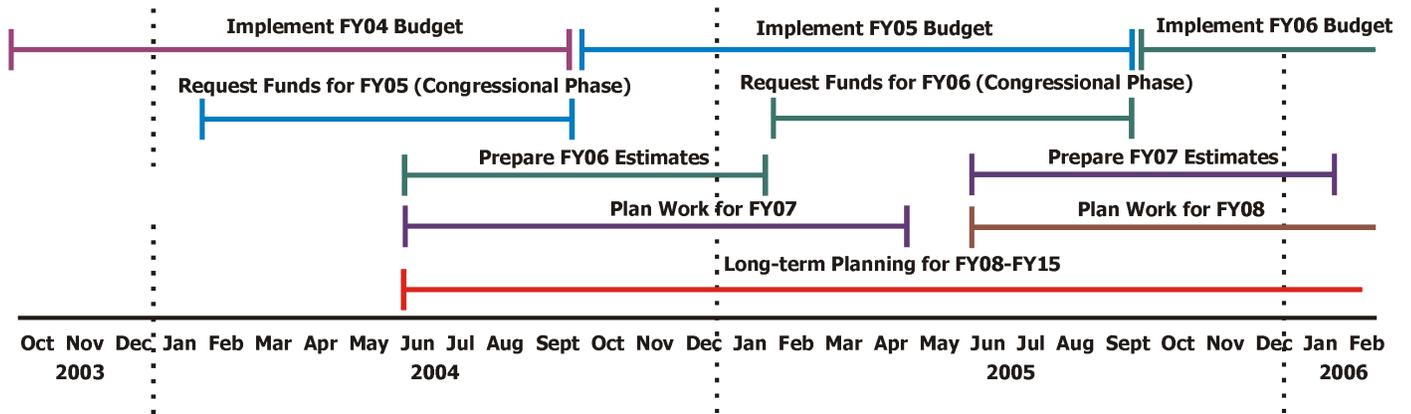


# THE BUDGET AND PLANNING PROCESS

- The Yuma Area Office prepares work plans to identify work activities. The Regional Budget Management Team uses the information in the work plans to prepare and submit a regional plan to Reclamation. Reclamation reviews the information submitted and prepares a budget for the Department of the Interior (DOI). DOI reviews the Reclamation budget and provides direction to prepare the draft of the President's budget which is submitted to Office of Management and Budget (OMB) for review.
- The **Official Budget** is developed in accordance with the Administration's goals and directions which flow from the OMB to the various departments and independent agencies.
- The Official Budget process is a recurring and standard process with prescribed guidelines, content, and format. Budget estimates remain confidential until the President's official submission to Congress in February.
- **Appropriations Bills** are due to be signed into law by October 1 each year. **Continuing Resolutions** occur when an appropriations bill is not passed by the start of a fiscal year. **Transfers** take unspent money from one project and give it to another. **Supplemental Bills** are issued when additional money is needed after the fiscal year has begun.
- The **authorization process** gives permission to establish or renew programs and may set an appropriations ceiling. Authorization does not guarantee funding. The appropriations process allocates funds to be utilized for authorized programs. According to both Rule 16 in the Senate and Rule 21 in the House, authorization must occur before appropriation. Congress is not allowed to allocate money to programs not previously authorized by law. Authorizing legislation is not admissible in appropriations bills.
- Reclamation funding is provided for in the **Energy and Water** Appropriations bill.



# YAO Budget Process and Resource Plan Timeline



• The Yuma Area Office budgeting process involves working concurrently on separate budgets for several fiscal years, beginning with the current **fiscal year 2004 (FY04)**.

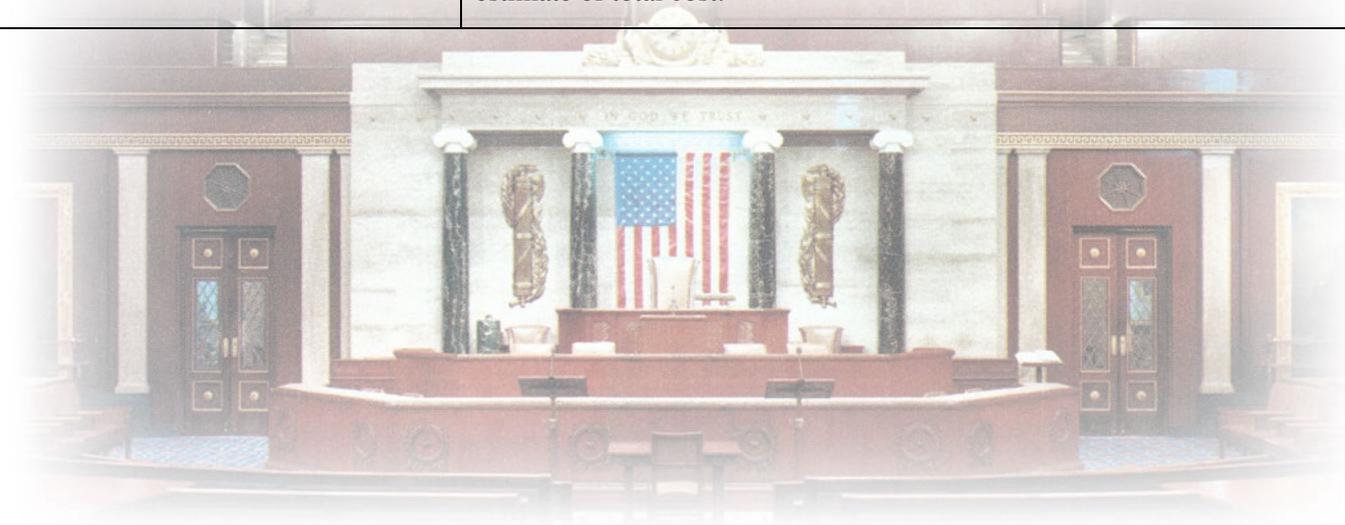
• During **FY04**, the Yuma Area Office will be:

- Implementing the **FY04** budget
  - Preparing the request for the **FY05** budget
  - Preparing estimates for the **FY06** budget
  - Planning for the **FY07** budget and
  - Conducting long-term planning for **FY08-15**

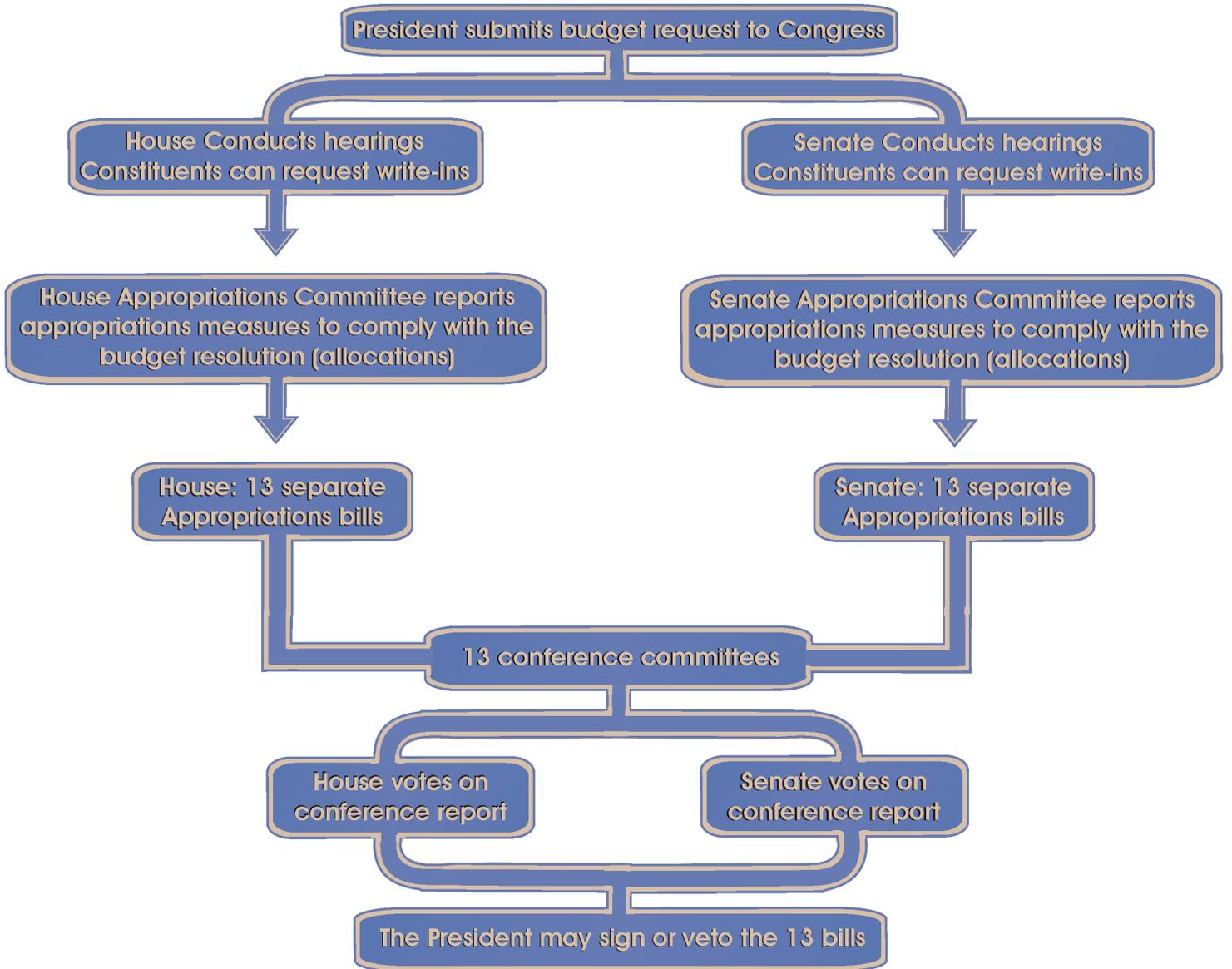


## Budget Process and Resource Plan Timetable

Date	Activities
<b>Implement</b>	
October-September	OMB apportions funds to agencies. Agencies incur obligations and make outlays.
<b>Request</b>	
By first Monday in February	President submits budget to Congress.
February-September	Congressional hearings; Constituents may request write-ins.
October 1	Fiscal year begins.
<b>Estimate</b>	
June-August	Agencies prepare draft budget request based on OMB and guidance
September	Draft budget submitted to OMB
September-November	OMB reviews draft and provides final decisions
November-December	Agencies finalize budget request based on OMB decisions
<b>Planning</b>	
June-October	Yuma Area Office prepares work plans
October-December	Regional Budget Management Team prepares Regional estimates
January-April	Reclamation prepares estimates for submittal to the Department of Interior
<b>Long-Term Planning</b>	
Continuous	Yuma Area Office identifies potential activities to be included in future budget requests including general description, desired outcome and rough estimate of total cost.



# The United States Appropriations Process



# PARTNERSHIPS

◆ A partnership is a close cooperative relationship the Yuma Area Office has entered into with another entity or agency in pursuit of a common business goal. These partnerships are current, existing relationships that may take the form of an agreement, understanding, formal alliance, and/or accord.

- Arizona Game and Fish
- Arizona Department of Agriculture
- Arizona State Historic Preservation Office
- Arizona State Parks
- Bard Water District
- Bullhead, City of
- Bureau of Indian Affairs
- Bureau of Land Management
- California, State of
- California Wildlife Conservation Board
- Cibola Valley Irrigation and Drainage District
- Chemehuevi Indian Tribe
- Coachella Valley Recreation and Park District
- Cocopah Indian Tribe
- Colorado River Indian Tribe
- Environmental Protection Agency
- Fort Mohave Indian Tribe
- Imperial Irrigation District
- Imperial National Wildlife Refuge
- International Boundary and Water Commission
- Metropolitan Water District
- Mohave Valley Irrigation and Drainage District
- Palo Verde Irrigation District
- Quechan Indian Tribe
- University of Arizona
- U.S. Department of Agriculture
- U.S. Fish and Wildlife Service
- U.S. Geological Survey
- U.S. Navy, Southwest Division
- Wellton-Mohawk Irrigation and Drainage District
- Wellton-Mohawk Valley Natural Resource Conservation District
- Yuma County Water Users' Association
- Yuma, City of
- Yuma Irrigation District
- Yuma-Mesa Irrigation and Drainage District



# FISCAL YEARS 2004-2006 ACTION ITEMS

## Baseline Work:

- Imperial, Laguna, and Palo Verde Dams: Tabletop and Functional Exercises
- Lower Colorado River: Vegetation clearing of Giant Salvinia Molesta
- Laguna Settling Basin: Extend basin
- Main Outlet Drain, Main Outlet Drain Extension, and Bypass Drain: Conduct outages
- Manchester Quarry: Finalize permit
- Metropolitan Water District:
  - Cooperative Research and Development Agreement
  - Brine crystallizer testing
- Prepare and conduct land reviews
- City of Somerton: Corrosion testing
- Water Conservation: Technical Assistance to area water and irrigation districts
- Water Delivery to irrigation districts and Mexico
- Yuma Desalting Plant:
  - Corrosion studies
  - Cellulose acetate elements and forward osmosis testing
  - Polyamide element testing



Imperial Dam - RM 49.2

Invasive Species: Giant Salvinia Molesta



## 💧 Initiative Work:

- Agnes Wilson Bridge: Repair bankline on Arizona side
- All American Canal:
  - Reservoir construction
  - Canal lining project
- Bard Irrigation District and Quechan Indian Tribe: Rehabilitation of irrigation system
- Bullhead City: Rotary Park improvement project Phase II
- California Channel: Riparian habitat restoration
- Cibola Bridge: Deck repair at RM 93.6
- Coachella Canal: Lining project
- Coachella Valley: Coral Mountain Regional Park construction
- Colorado and Gila Rivers: Alignment of confluence
- Draper Lake: Restoration project
- Environmental and Interagency coordination: Water resources planning
- Flat Tailed Horned Lizard studies
- Gila Levee: Confine direct flow away from levee
- Gila Project: Cultural Resources Programmatic Agreement
- Groundwater management Supervisory Control and Data Acquisition (SCADA) System study and design
- Lower Colorado River: Well inventory



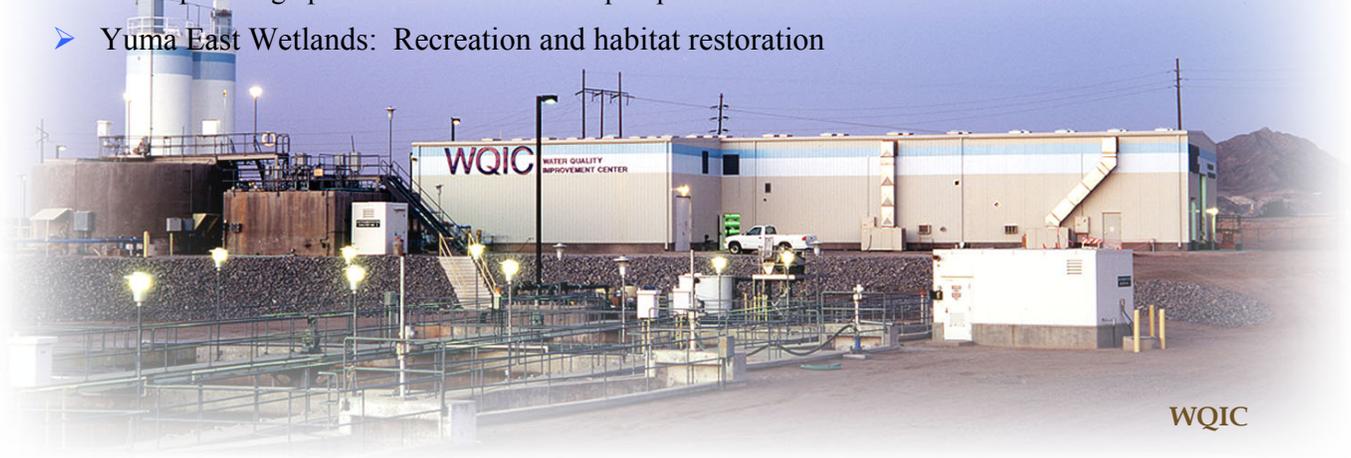
California Channel: Riparian habitat restoration - RM 56

## 💧 Initiative Work Continued:

- Main Outlet Drain, Main Outlet Drain Extension, Drainage Pump Outlet Channel and Bypass Drain: Upgrades and repairs
- Native American Affairs outreach and technical assistance activities
- Needles and Topock: Repair severe erosion to bankline above basin
- Palo Verde Dam: Bankline stabilization on Arizona side below Dam - RM 133.7 to 132.6
- Razorback Sucker studies
- Technical Assistance to states: Planning
- Walker Lake: Rehabilitation project
- Yuma Area Office:
  - Upgrade Local Area Network
  - Develop and implement Environmental Management System Plan
- Yuma Desalting Plant:
  - Aluminum Bronze Evaluation Research Unit Repair
  - Modify clearwell pH control system
  - Permit activities
  - Replacement waters to meet Title I objectives
  - Replace control block isolation valves
  - Replace high pressure reverse osmosis pumps
- Yuma East Wetlands: Recreation and habitat restoration



Drainage Pump Outlet Channel



WQIC

## ◆ **Nine Baseline Work activities**

- **Bankline Maintenance:** Maintenance work associated with banklines, jetties, culverts, weirs, roads (which include levees, access roads, banklines, canals, Highway 76), bridges, training structures, washfans, quarries, and stockpile sites.



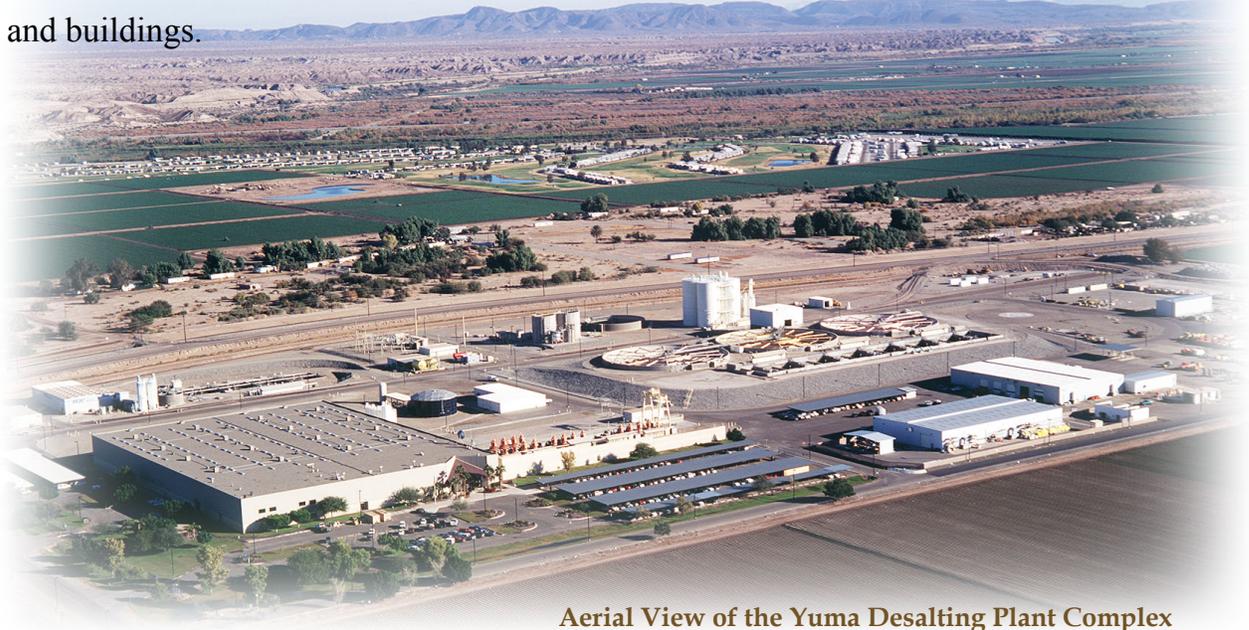
**Destabilized Bankline**

- **Basin Dredging:** Sediment removal activities at the Laguna Settling basin and the Imperial Dam Reservoir to reduce the total amount of sediment reaching Mexico, improve the quality and quantity of water received at the Gila Gravity Canal Headworks, restore sediment trap efficiency, improve small boat navigation and safety, and allow proper operation of Imperial Dam.



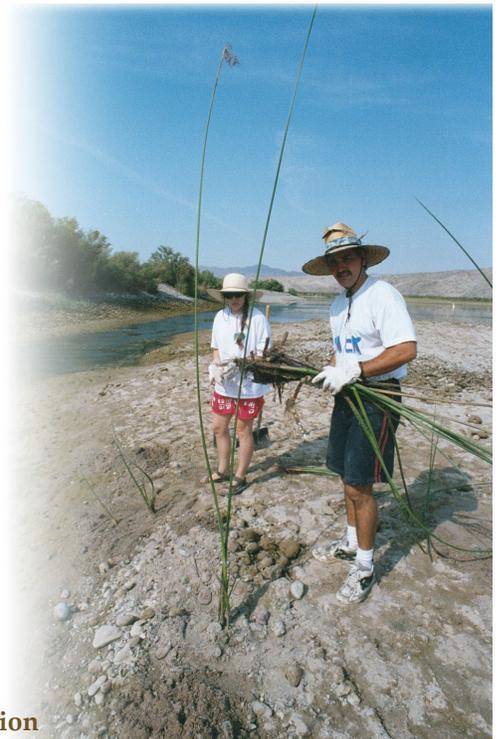
**Cibola Dredge**

- **Buildings & Grounds:** Maintenance work associated with facilities owned and used by YAO, including the Ehrenberg, Laguna, Needles, and Yuma offices. Operational functions include upkeep of grounds, potable water, sewage, communication, security, fire protection, and waste disposal systems, and warehouse processes. Maintenance functions include fencing and gate repairs and upkeep of parking, yards, and storage areas, small equipment, and buildings.



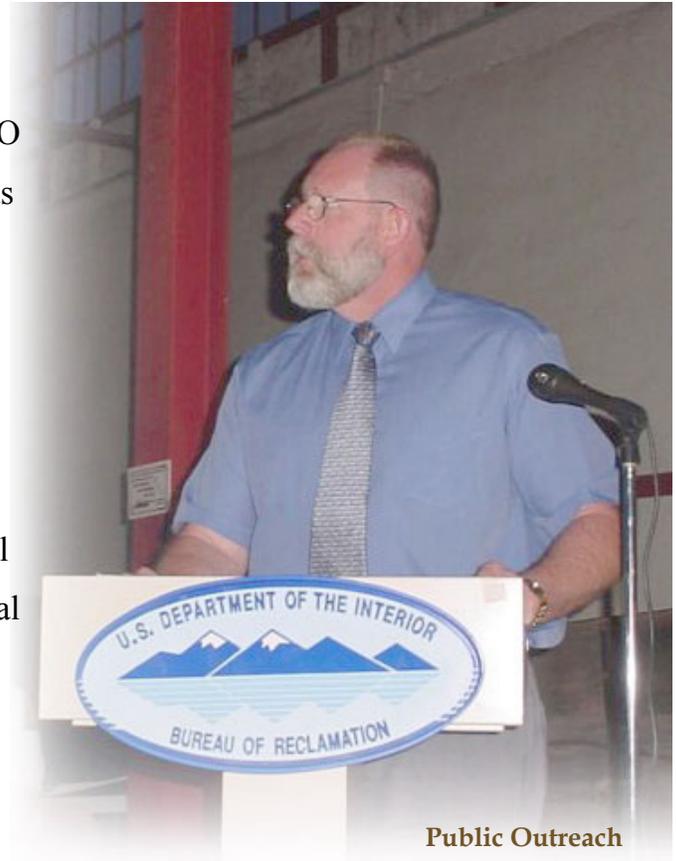
Aerial View of the Yuma Desalting Plant Complex

- **Conservation & Environmental Activities:** Work associated with restoration, conservation, or creation of critical habitat; conservation of endangered or threatened species; promotion of water and energy conservation and pollution prevention; control of invasive species; environmental stewardship; and the identification of pertinent hazardous material requirements.



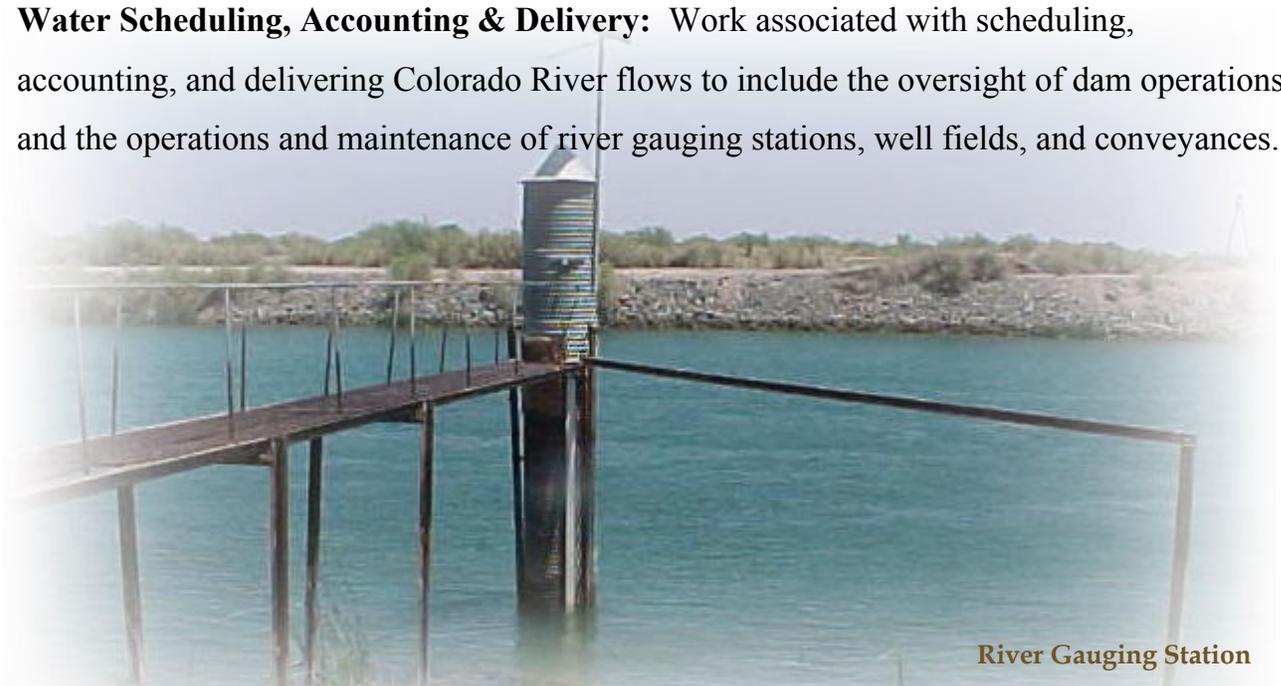
Environmental Mitigation

- **Management & Oversight:** Activities associated with general office functions required to maintain the operation of the YAO and associated facilities. Included are various functions not found under other baseline activities and involve such actions as scheduling, conducting, and attending office meetings; implementing public outreach programs; performing supervisory activities; providing budgetary, planning, and analytical services; and conducting various other clerical and administrative activities.



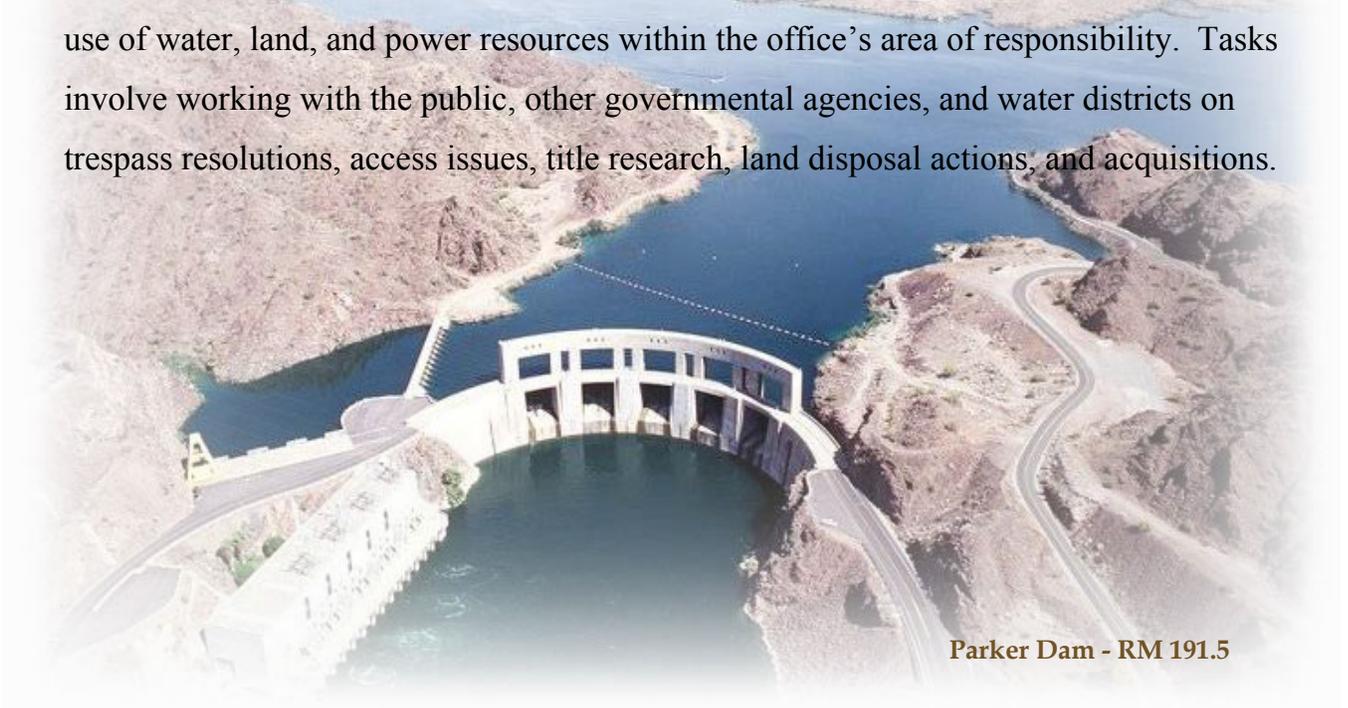
Public Outreach

- **Water Scheduling, Accounting & Delivery:** Work associated with scheduling, accounting, and delivering Colorado River flows to include the oversight of dam operations and the operations and maintenance of river gauging stations, well fields, and conveyances.



River Gauging Station

- **Water, Lands & Power Assistance:** Work associated with the development and administration of agreements such as contracts, grants, easements, and rights-of-way for the use of water, land, and power resources within the office's area of responsibility. Tasks involve working with the public, other governmental agencies, and water districts on trespass resolutions, access issues, title research, land disposal actions, and acquisitions.



Parker Dam - RM 191.5

- **Well field & Conveyance Systems:** Maintenance work associated with Yuma area wells and the four well fields: Yuma Mesa, Yuma Valley, South Gila, and 242, including pumps, buildings, and grounds; Conveyance systems' canals and pipes; and aquifer information including acquisition, maintenance, and analysis.



Lining of Bypass Drain

- **Yuma Desalting Plant Operations & Maintenance:** Maintenance activities associated with the operation and maintenance of the Water Quality Improvement Center (WQIC). This includes maintaining the Yuma Desalting Plant (YDP) in ready reserve status and maintaining its ability to serve the water and power needs of the area office’s building and grounds.



Yuma Desalting Plant Process Area

## 💧 Initiative Work

The following are a few examples of our projected FY04-06 initiative work.

- **Lower Cibola Bridge Repair RM 93.6:** The Cibola Bridge is primarily a farm and wildlife refuge access structure. The existing deck has delaminated and spalled in numerous areas, exposing the reinforcing steel. Load capacity has been reduced, traffic lanes have been cut to one, and vehicles have been using the center lane to safely cross. In concert with these problems, the guardrails need repair and/or replacement to bring this bridge up to Federal Highway standards.

Cibola Bridge – RM 93.6



- **Flat Tailed Horned Lizard:** This activity supports field studies and research conducted toward achieving the goals and objectives established in a multi-agency conservation agreement for management of the Flat Tailed Horned Lizard (FTHL), of which Reclamation is a signatory.

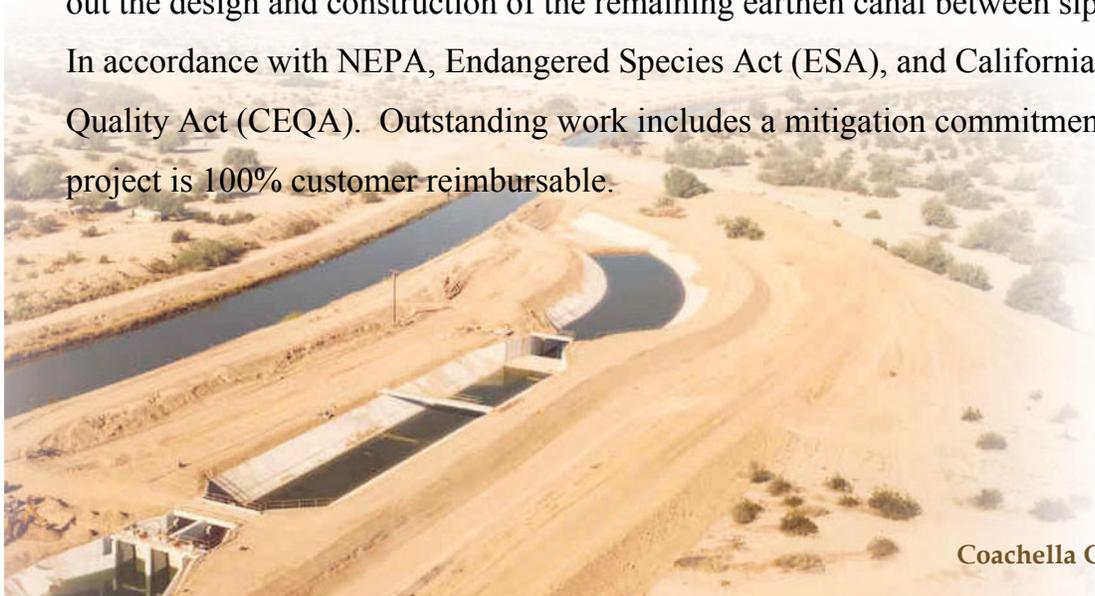
Examples of studies include surveys to determine population, distribution, and relative abundance of FTHLs in both designated management areas and known occupied

habitat. Aerial photography, mapping, and analysis of habitat disturbances in management areas are also necessary.



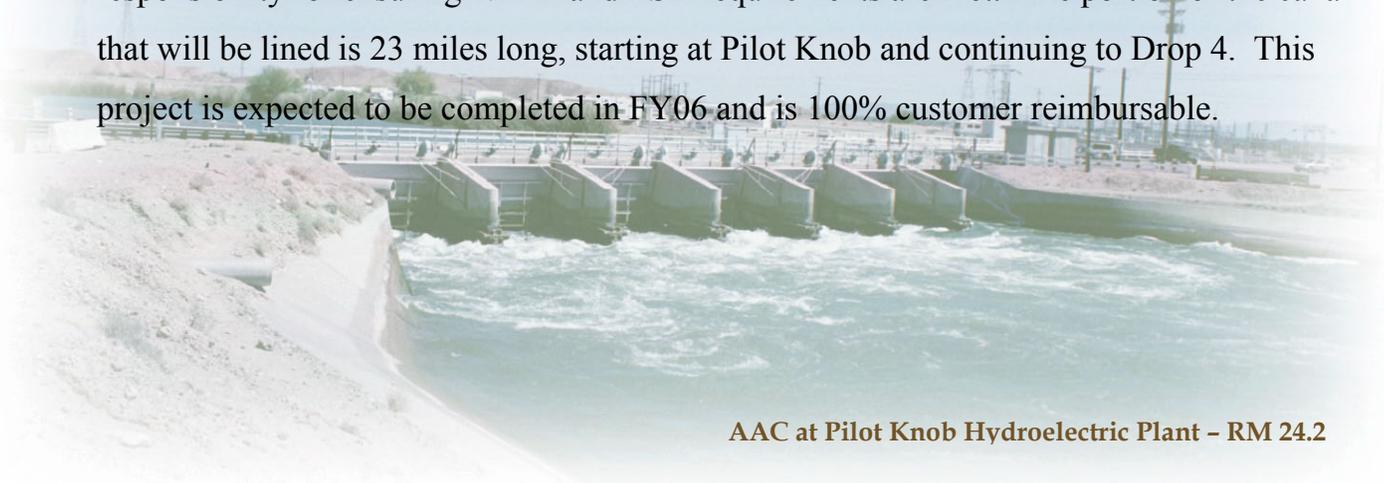
Flat Tailed Horned Lizard

- **Coachella Canal Lining Project:** The Coachella Valley Water District receives water through a turnout on the All American Canal. The lining of the Coachella Canal will save approximately 30,858 Acre Feet (AF) annually. The purpose of this initiative is to contract out the design and construction of the remaining earthen canal between siphons 7 and 32. In accordance with NEPA, Endangered Species Act (ESA), and California Environmental Quality Act (CEQA). Outstanding work includes a mitigation commitment plan. This project is 100% customer reimbursable.



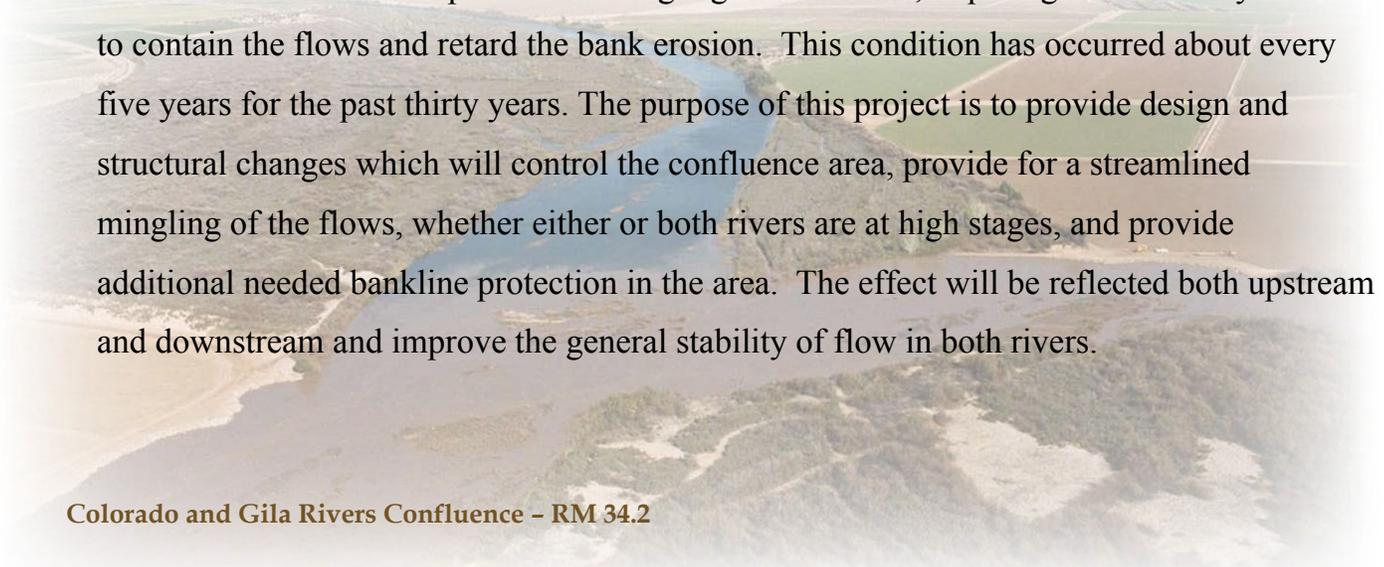
Coachella Canal

- **All American Canal Lining:** The All American Canal (AAC) lining is critical to conserving water, estimated at 67,000 AF annually, and enabling California to meet its 4.4 MAF goal. Imperial Irrigation District (IID) is acting as the lead agency for the design and construction of the project, and has responsibility for ensuring all CEQA requirements are met. Reclamation is the lead agency for coordination of the environmental compliance with responsibility for ensuring NEPA and ESA requirements are met. The portion of the canal that will be lined is 23 miles long, starting at Pilot Knob and continuing to Drop 4. This project is expected to be completed in FY06 and is 100% customer reimbursable.



AAC at Pilot Knob Hydroelectric Plant - RM 24.2

- **Alignment of Colorado and Gila Rivers Confluence:** The confluence of the Gila and Colorado Rivers is in an ephemeral state, free to migrate back and forth as much as a half mile, depending on which river is dominant at the time. This movement has created severe bank and bottom erosion problems during high flow events, requiring extraordinary efforts to contain the flows and retard the bank erosion. This condition has occurred about every five years for the past thirty years. The purpose of this project is to provide design and structural changes which will control the confluence area, provide for a streamlined mingling of the flows, whether either or both rivers are at high stages, and provide additional needed bankline protection in the area. The effect will be reflected both upstream and downstream and improve the general stability of flow in both rivers.



Colorado and Gila Rivers Confluence - RM 34.2

- **Native American Affairs:** The Native American Affairs Program supports selected Reclamation activities with Indian tribes in accordance with the Secretary of the Interior’s Indian Trust responsibility. Such activities include making Reclamation resources available to the Indian Country; assisting tribal governments to protect, manage, and develop water and related resources; coordinating and executing technical assistance programs in accordance with the applicable section of Reclamation's implementation plan; supporting the Indian Self-Determination programs; and training Reclamation employees and members of federally recognized tribes in water resources related areas. Additionally, funds will provide for the coordination and administration of this program, including tribal outreach.



**Native American Affairs Technical Assistance**



# FISCAL YEAR 2003 ACCOMPLISHMENTS

## 💧 Baseline Work:

### ➤ Bankline Maintenance:

- ☑ C-8 Backwater: Cleaned sediment buildup in outlet
- ☑ Laguna Settling Basin: Re-established 3 miles of road on Arizona and California sides
- ☑ Mohave Division: Performed maintenance on jetties
- ☑ Mohave and Parker Divisions: Performed maintenance of roads
- ☑ Palo Verde and Laguna Divisions: Placed rip-rap along the banklines
- ☑ River inspection trips: One completed
- ☑ Resource agency river reviews: Three completed
- ☑ Southerly International Boundary (SIB): Modified a steel footbridge to span the new concrete conveyance channel
- ☑ Stockpile sites and quarries: Performed physical inspections and maintained permits
- ☑ Walter's Camp: Removed wash fan



May 2003 River Review

### ➤ Basin Dredging

### ➤ Buildings and Grounds:

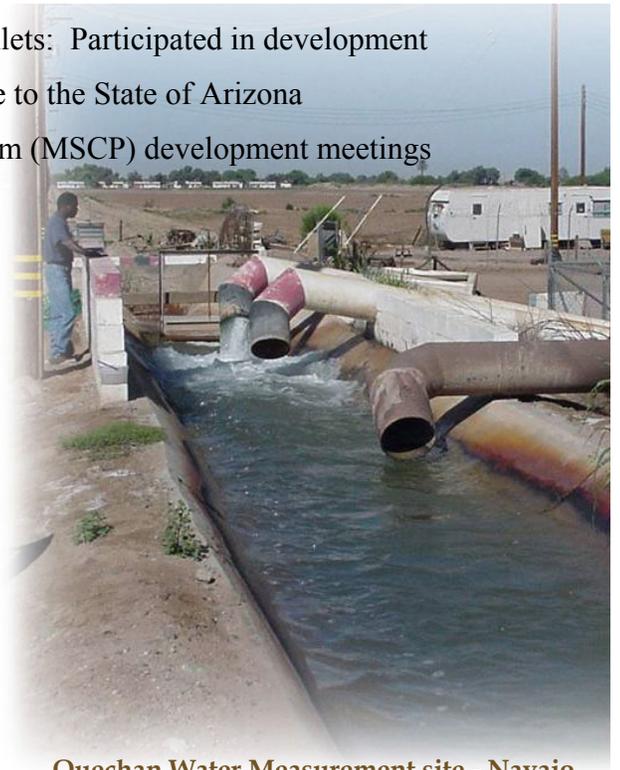
- ☑ Laguna Field Office: Installed automatic gate operator for the card key system
- ☑ Yuma, Ehrenberg, and Laguna Offices: Performed annual repairs and maintenance



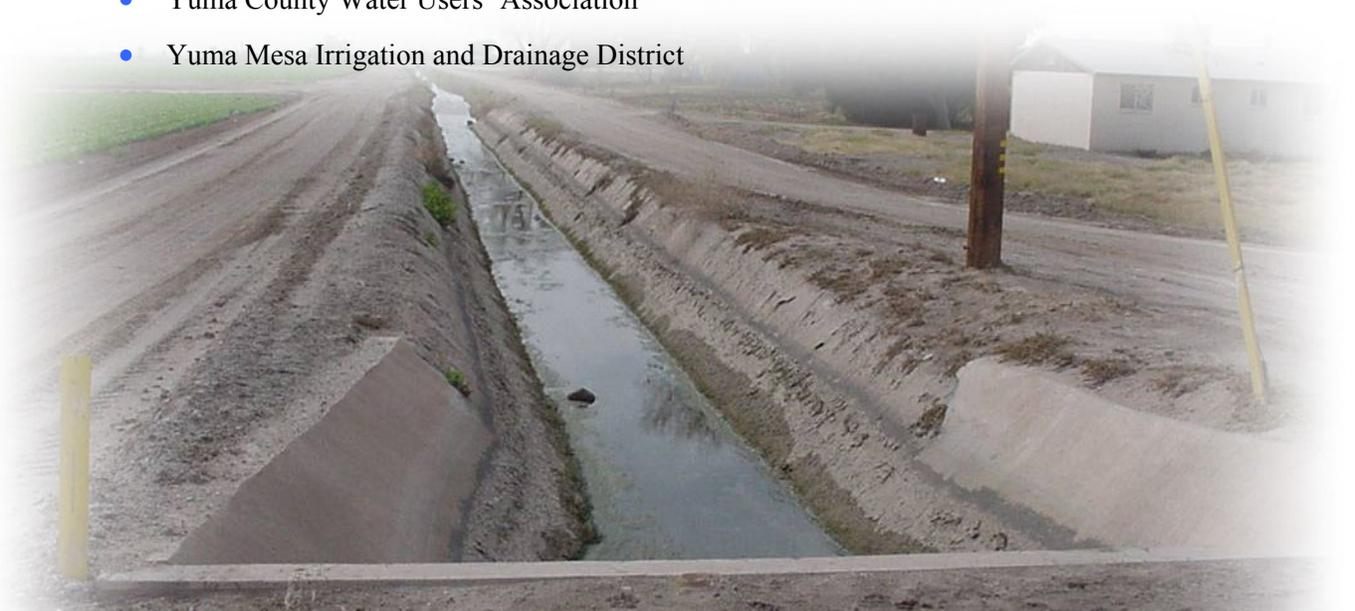
Southerly International Boundary - Steel footbridge

➤ Conservation and Environmental:

- ☑ 2003 Yuma Birding Festival Informational pamphlets: Participated in development
- ☑ Annual energy conservation report: Submitted the to the State of Arizona
- ☑ Participated in Multi-species Conservation Program (MSCP) development meetings
- ☑ Section 7 consultation needs reviewed
- ☑ Water conservation activities with:
  - Bard Water District
  - Chemehuevi Indian Tribe
  - Cibola Valley Irrigation and Drainage District
  - Cocopah Indian Reservation
  - Colorado River Indian Tribes
  - Fort Mohave Indian Tribe
  - Gila Monster Ranch
  - Imperial Irrigation District
  - Mohave Valley Irrigation and Drainage District
  - North Gila Valley Irrigation District
  - Quechan Indian Reservation
  - University of California, Desert Research Center
  - Wellton-Mohawk Valley Natural Resource Conservation District
  - Yuma County Water Users' Association
  - Yuma Mesa Irrigation and Drainage District



**Quechan Water Measurement site - Navajo Main - Heading of Pequod Canal**



**Bard - Ranch 5**

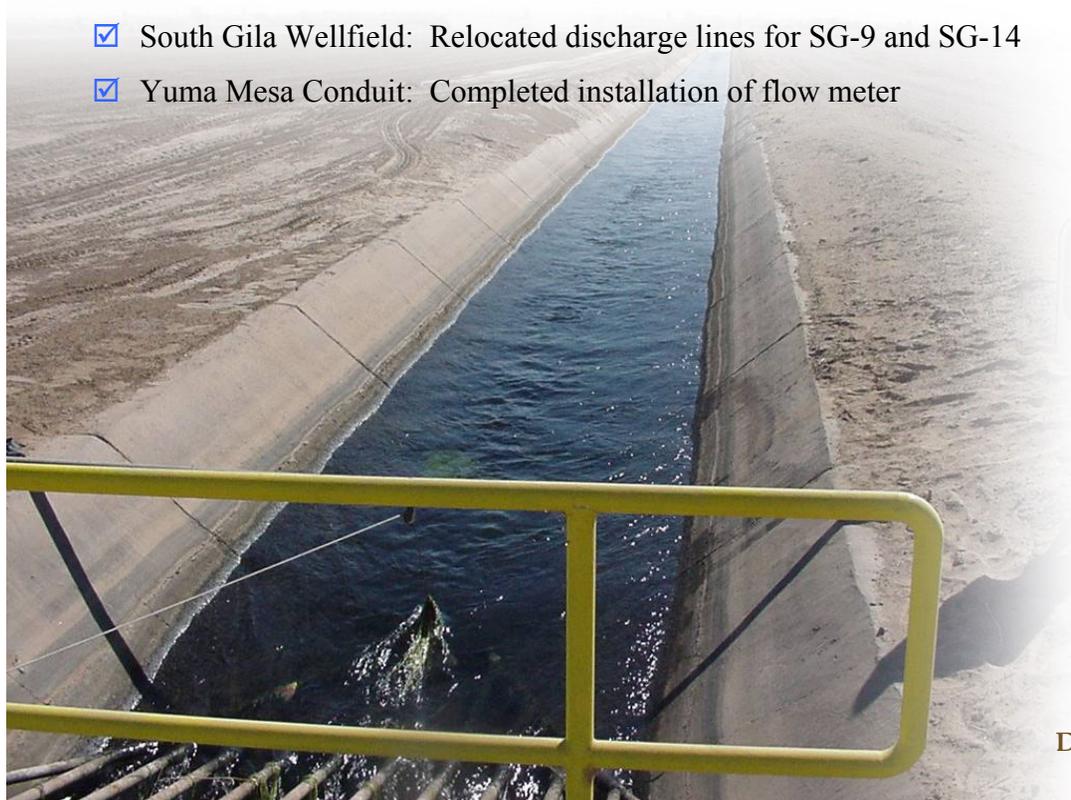


- Maintenance and Oversight
- Water, Land, and Power:
  - ☑ Far West Water Company: Attended meetings
  - ☑ Gila Monster Ranch wells: Attended meetings
  - ☑ Parker-Davis Project Post-2008 Marketing Plan: Provided data and attended meetings



Well Repairs

- Water Scheduling, Accounting, and Delivery
- Wellfield and Conveyance:
  - ☑ 242 Wellfield: Installed SCADA systems and sensors on select 242 wells
  - ☑ Bypass and 242 Channels: Cleaned
  - ☑ Drainage Pump Outlet Channels (DPOC) 1 through 4: Completed outages and repairs
  - ☑ Groundwater model completed
  - ☑ Groundwater management study: Continued work
  - ☑ South Gila (SG) Wellfield: Installed new pumps for SG-7, SG-716, and SG-717 wells
  - ☑ South Gila Wellfield: Rehabilitated SG-5 and SG-714 wells
  - ☑ South Gila Wellfield: Relocated discharge lines for SG-9 and SG-14
  - ☑ Yuma Mesa Conduit: Completed installation of flow meter



DPOC 2



➤ Yuma Desalting Plant:

- ☑ A-22 disposal site: Renewed the aquifer protection permit
- ☑ Cold storage of membranes: Renewed contract
- ☑ Research project with Metropolitan Water District and the City of Somerton started
- ☑ Service and potable water provided to the YDP, WQIC, and YAO facility
- ☑ Pilot System 1: Completed tie-in to Main Outflow Drain Extension II to allow delivery of treated flows to the Colorado River
- ☑ Solids Contact Reactor: Investigated deficiencies
- ☑ YDP Assessment: Completed

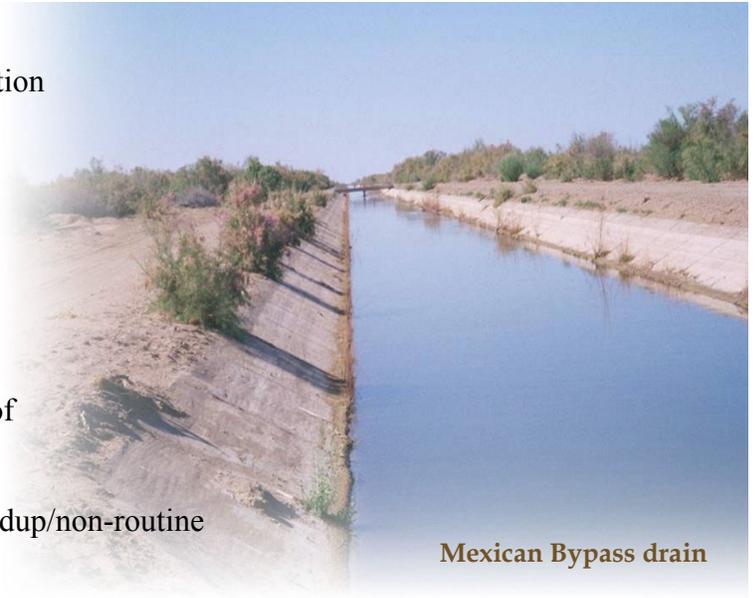


WQIC Research Project - Solids Contact Reactor

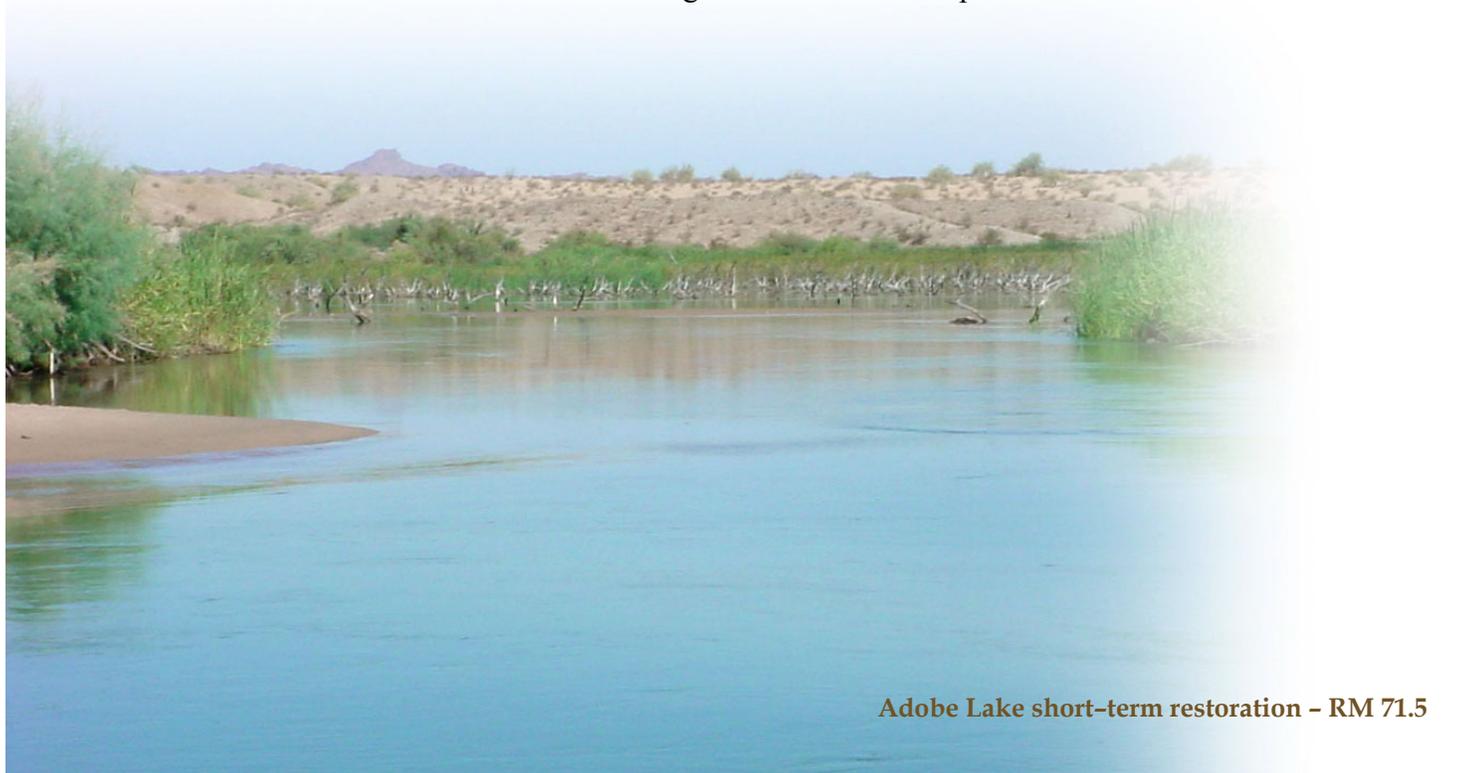


## Initiative Work:

- ☑ Adobe Lake: Short-term restoration
- ☑ Beal Lake: Placement of 4000 feet of irrigation pipe
- ☑ Beal Lake: Rehabilitation of water control structure
- ☑ Bullhead City: Rotary Park Improvement Project Phase I
- ☑ Mexican Antelope Wells II: Enhancement of endangered Pronghorn Forage program
- ☑ Mexican Bypass drain: Clean sediment buildup/non-routine maintenance
- ☑ Southerly International Boundary: Control equipment and integration
- ☑ YAO: Foundation Information Resource Management (FIRM) Database - Completed reconciliation of lands and financial Records associated with Yuma area projects
- ☑ YAO: Migration to Microsoft Operating System XP and Office Suite XP
- ☑ YDP: Replace Tecan diluter (a 4 channel diluter for diluting water samples)
- ☑ Cibola and Havasu National Wildlife Refuges: Restoration of riparian areas



Mexican Bypass drain



Adobe Lake short-term restoration - RM 71.5

# ACRONYMS LIST

- ◆ **AAC** – All American Canal
- ◆ **AF** – Acre Feet
- ◆ **CEQA** – California Environmental Quality Act
- ◆ **DOI** – Department of the Interior
- ◆ **DPOC** – Drainage Pump Outlet Channel
- ◆ **ESA** – Endangered Species Act
- ◆ **FIRM** – Foundation Information Resource Management
- ◆ **FTHL** – Flat Tailed Horned Lizard
- ◆ **FY** – Fiscal Year
- ◆ **HQ** - Headquarters
- ◆ **IBWC** – International Boundary and Water Commission
- ◆ **IID** – Imperial Irrigation District
- ◆ **MAF** – Million Acre Feet
- ◆ **MODE** – Main Outlet Drain Extension
- ◆ **MSCP** – Multi-Species Conservation Program
- ◆ **NEPA** – National Environmental Policy Act
- ◆ **OMB** – Office of Management and Budget
- ◆ **QSA** – Colorado River Water Delivery Agreement (Quantification Settlement Agreement)
- ◆ **RM** – River Mile
- ◆ **SCADA** – Supervisory Control and Data Acquisition
- ◆ **Section 7** – U.S. Fish and Wildlife consultation on endangered species
- ◆ **SIB** – Southerly International Boundary
- ◆ **SG** – South Gila
- ◆ **WQIC** – Water Quality Improvement Center
- ◆ **XP** – Microsoft operating system platform: Windows XP
- ◆ **YAO** – Yuma Area Office
- ◆ **YDP** – Yuma Desalting Plant

